

Escrap Legislative Update

*Missouri Solid Waste Advisory Board Meeting
November 4, 2015*



MORA's Legislative Committee

- * Dave Beal, Vice President, EPC
 - * Kit Brewer, RCSI
- * Angie Gehlert, MORA Exec. Director
 - * Kurt Gerdes, M.A. Associates
- * Bill Guinther, Retired - COMMITTEE CHAIR
 - * Stephen Herring, Republic Services
- * Marleen Leonce, Kansas Department of Public Works
 - * Mollie McAuley, MRC
- * John Viau, Northwest Missouri State University
 - * Ryan Wilkey, Sims Global

Senate Bill 530, 1990

- * Established a 40% waste diversion goal with a target date of 1998 (260.225.2(3) RSMO)
- * Created landfill bans for:
 - * Whole tires (January 1, 1991)
 - * Large appliances (white goods) (January 1, 1991)
 - * Lead acid batteries (January 1, 1991)
 - * Yard waste (January 1, 1992)
- * Led to the formation of the existing 20 regional solid waste management districts, the tipping fee and the solid waste management fund to finance waste diversion efforts.

Electronic Products Recycling and Reuse Act

- * Progression and extension of the 1990 law
- * What the bill would do:
 - * Bans knowingly putting into a landfill, residential and small business generated electronic wastes (Schools and large industry already covered under RCRA)
 - * Creates Original Equipment Manufacturers (OEMs) responsibility for assisting with the recovery of Covered Electronic Devices (CEDs)

Sections of the Act

- * Definitions
 - * Guidelines for OEMS
 - * Guidelines for Processors
 - * Guidelines for Collectors
 - * Guidelines for DNR
 - * Guidelines for SWMDs
 - * Funding mechanism
 - * Penalties and fines
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- * Total length of Act: about 13 pages.

Specific Details

- * Progressive recovery goals increasing annually: 40%, 50%, 60%, 75%
- * Recovery is based upon number of units sold, not tonnage
- * Recovery does not have to be brand specific
- * Funding to be determined in the rule making process but to be tiered with fees assessed to OEMs, processors, collectors
- * Fees distributed through the existing SWMD fund with a slightly different structure. The 61% will be equally divided between the 20 districts (Solid Waste Management District temporary waiver)
- * Soft ban

What is Exempted From the Act

- * Electronics from white goods
- * Electronics from vehicles
- * Such things as counter top type appliances
- * Sheltered workshops (Requires a contractual relationship to a R2 or e-Steward processor)

Environmental Issues

- Electronics contain toxic materials
 - Lead, mercury, cadmium, beryllium, flame retardants, Freon, and even arsenic in older televisions
- If land filled these toxins can leach into ground water, streams, soil, and air.



Environmental Issues

- * CRT (CATHODE Ray Tube) issues:
 - * Contain large amounts of leaded glass
 - * Expensive to “properly recycle”
 - * Often end up in landfills, abandon in warehouses, or dumped in fields
- * Uncertified recyclers often collect CRTs free to get other valuable materials and never end up properly recycling them



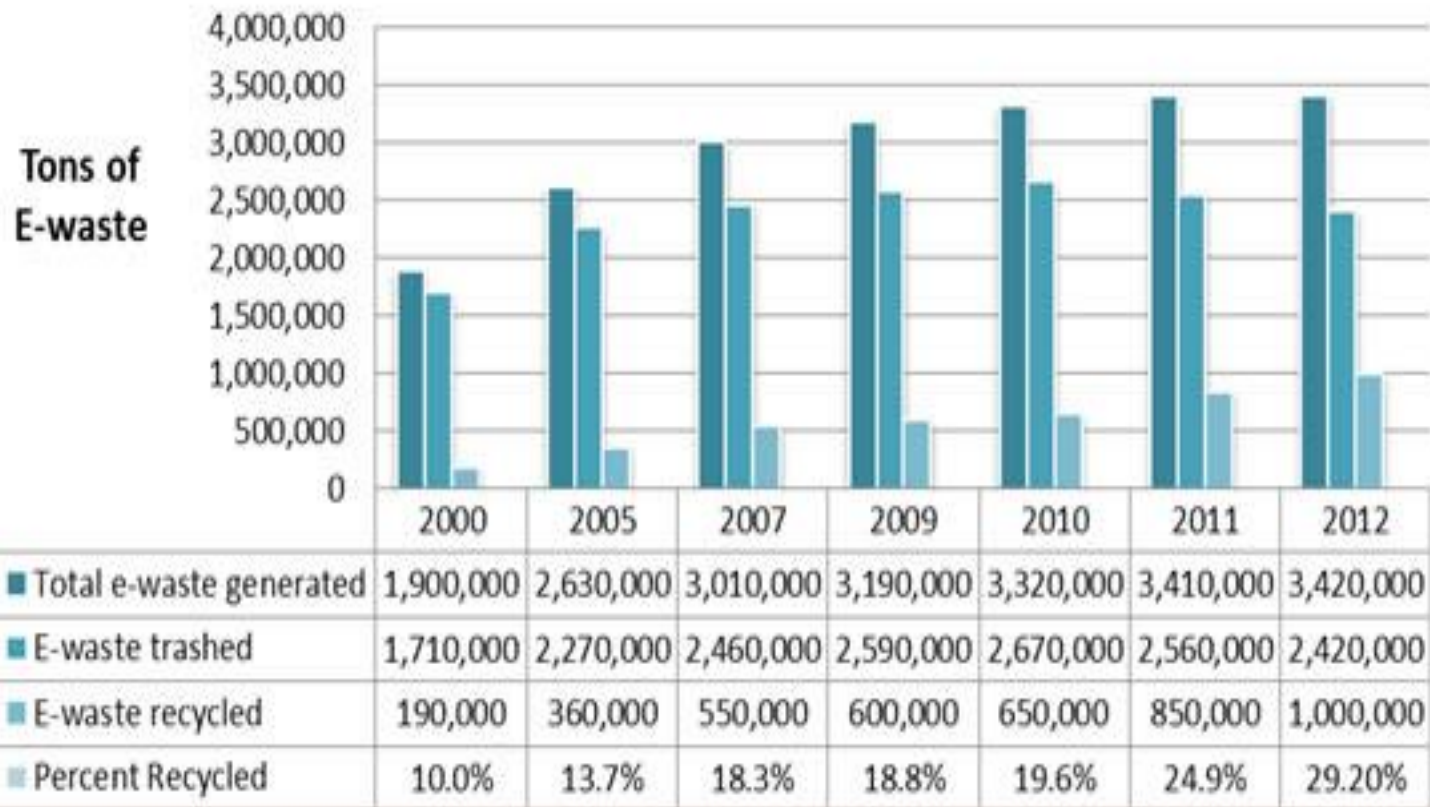
National Certifications



- ❖ Both are similar and highly recognized third party audited certifications
- ❖ Perform annual audits as well as random audits
- ❖ Standards set forth requirements relating to environmental, health, safety, and security aspects of electronics recycling.

Economics/Job Creation

E-Waste Generation and Recycling 2000-2012



Note: This chart, showing statistics from 2012, uses the most recent data available, published in Feb 2014. Those reports are posted annually on the EPA's website <http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>

Economics/Job Creation

The electronic scrap industry:

Boosts the US economy by \$20.6 billion including 1.45 billion in exports (this is up from less than \$1 billion in 2002)

Employs more than 45,000 fulltime employees, which is up from 6,000 in 2002

Has processed 4.4 million tons of which 93% are reused and recycled domestically

Source:

2015 *The ISRI Scrap Yearbook*

Institute of Scrap Recycling Industries



Economics/Job Creation

- * According to the Coalition for American Electronics Recycling, every 172,000 lbs of electronics recycled creates one job directly, indirectly creates 2.
- * *MRC expected 14 million lbs in 2014 and has 71 employees.
 $14 \text{ million lbs} / 172,000 = 81.4 \text{ jobs}$*
- * *EPC in 2013 recycled 3.2 million lbs at St. Charles location and has 17 employees. $3.2 \text{ million} / 172,000 = 18.6 \text{ jobs}$*
- * *Computer Recycling Center ~2 million lbs at Springfield and has 14 employees. $2 \text{ million} / 172,000 = 11.6 \text{ jobs}$*
- * In 2012, 2.4 million tons of e-waste trashed would have created over 28,000 jobs nation wide.

Energy/Natural Resource Conservation

- * Electronics are made from valuable resources, such as precious metals, copper, and engineered plastics, all of which require considerable energy to process and manufacture.
- * Recycling recovers valuable materials, reduces greenhouse gas emissions, reduces pollution, saves energy, and saves resources by extracting fewer raw materials from the earth.
- * Recycled aluminum only uses 5% of the energy and emissions needed to extract new aluminum.
- * The aluminum from one computer hard drive (equal to 40 soda cans) saves enough energy to power a television for 120 hours.
- * Recycling copper uses $1/10^{\text{th}}$ the energy of extracting virgin copper.

Sources

- * <http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>
- * <http://resources.schoolscience.co.uk/CDA/16plus/sustainability/copper3.html>
- * <http://www.epa.gov/region03/beyondtranslation/2013BTF/SessionB-Beautification/MichelleFeldman.pdf>
- * http://www.americanerecycling.org/images/CAER_Jobs_Study_Report_-_January_2013.pdf
- * <http://www.epa.gov/osw/conservation/materials/recycling/faq.htm#mining>

Questions?

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